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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,747	02/25/2005	Kenji Kouchi	T3736-9375US01	2069
181	7590	06/29/2006	EXAMINER	
MILES & STOCKBRIDGE PC 1751 PINNACLE DRIVE SUITE 500 MCLEAN, VA 22102-3833			ASTORINO, MICHAEL C	
			ART UNIT	PAPER NUMBER
			3736	

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/525,747

Applicant(s)

KOUCHI ET AL.

Examiner

Michael C. Astorino

Art Unit

3736

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1&2/2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 10-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 10-13 positively recites limitations that overlap statutory classes. In this case, the applicant has positively recited an apparatus with method steps. See MPEP 2173.05(p) II.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites, “means for selecting display styles, wherein the display style selecting means determines entire display period corresponds to display area for the vital sign by correlating with measurement period of the vital sign.” The limitation appears to be a direct translation and as such is indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6-11 and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Weisner et al. US Patent Number 5,262,944 A.

Claim 1. A vital sign display device for displaying a vital sign, comprising (*See also abstract and figures 1, & 3-5*):

means for obtaining a biological signal; (*See element numbers 24, 26 & 28*)

means for determining whether living body condition represented by the biological signal is abnormal or not, which is based on the obtained biological signal; (*See element number 76 & use of colors on the screen*) and

means for displaying a vital sign obtained from the biological signal, that allows to discriminate whether the condition is abnormal or not, which is based on the determination results from the determining means, wherein the vital sign is arranged in time series that allows to provide history of the vital sign. (*See element numbers 44 & 68*)

Claim 2. A computer readable medium having stored thereon the computer program for a vital sign display device that displays a vital sign, wherein the program is implemented in a computer and capable of causing the computer to perform, (*See also abstract and figures 1, & 3-5*):

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means for obtaining a biological signal; (*See element numbers 24, 26 & 28*)

means for determining whether living body condition represented by the biological signal is abnormal or not, which is based on the obtained biological signal; (*See element number 76 & use of colors on the screen*) and

means for displaying a vital sign obtained from the biological signal, that allows to discriminate whether the condition is abnormal or not, which is based on the determination results from the determining means, wherein the vital sign is arranged in time series that allows to provide history of the vital sign. (*See element numbers 44 & 68*)

Claim 3. A vital sign display device for displaying a vital sign, comprising (*See also abstract and figures 1, & 3-5*):

means for displaying a vital sign, obtained from the biological signal or signal generated from the biological signal, that allows to discriminate whether living body condition represented by the signal is abnormal or not, wherein the vital sign is arranged in time series that allows to provide history of the vital sign. (*See element numbers 24, 26 & 28; 76 & use of colors on the screen; and 44 & 68; See also abstract and figures 1, & 3-5*)

Claim 6. The device according to claim 1, further comprising means for selecting display styles, wherein the display style selecting means determines entire display period corresponds to display area for the vital sign by correlating with measurement period of the vital sign. (*See element numbers 44 & 68; See also abstract and figures 1, & 3-5*)

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Claim 7. The device according to claim 1, further comprising means for displaying item name of vital sign, wherein the vital sign item name displaying means displays the item name by relating the item name to the displayed vital sign. (*See element number 70, waveform label*)

Claim 8. The device according to claim 1, wherein the display style of vital sign is changed to another style when the abnormal condition occurs. (*Column 5, lines 49-67*)

Claim 9. The device according to claim 1, wherein the vital sign comprises at least an item of VPC (ventricular premature contraction), HR (heart rate), QT interval, or SpO₂ value (oxygen saturation in blood). (*See element numbers 44 & 68; inherent via use of ECG waveform*)

Claim 14. A method for displaying a vital sign comprising the steps of:

obtaining a biological signal; (*See element numbers 24, 26 & 28*)

determining whether living body condition represented by the biological signal is abnormal or not, which is based on the obtained biological signal; (*See element number 76 & use of colors on the screen*) and

displaying a vital sign obtained from the biological signal, that allows to discriminate whether the condition is abnormal or not, which is based on the determination results, wherein the vital sign is arranged in time series that allows to provide history of the vital sign. (*See element numbers 44 & 68*)

Claims 10-11 and 13 are rejected on the same basis as claims 1-3, 6-9 and 14.

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Claims 1, 4, 5, 12 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by JP 07-313478 (cited by applicant).

Claim 1. A vital sign display device for displaying a vital sign, comprising:

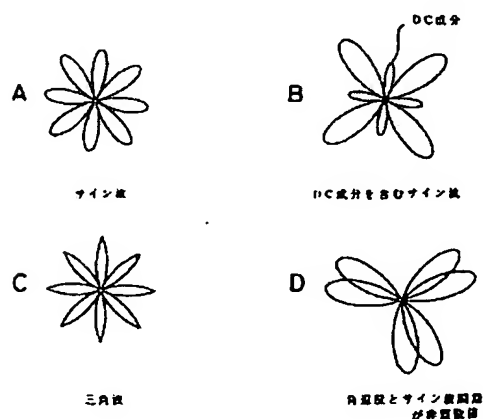
means for obtaining a biological signal; (EKG, see figures 6-10)

means for determining whether living body condition represented by the biological signal is abnormal or not, which is based on the obtained biological signal; (EKG, see figures 6-10) and

means for displaying a vital sign obtained from the biological signal, that allows to discriminate whether the condition is abnormal or not, which is based on the determination results from the determining means, wherein the vital sign is arranged in time series that allows to provide history of the vital sign. (EKG, see figures 6-10)

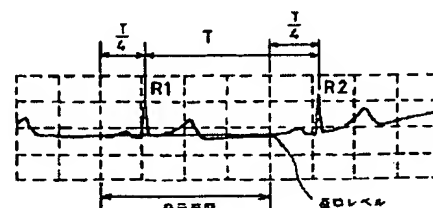
Claim 4. The device according to claim 1, wherein the vital sign is displayed so as to follow a circular shape according to time series of the vital sign. (EKG, see figures 6-10)

【図6】



本発明による特定波形のイメージ表示例

【図7】



本発明を心電図信号に適用した場合の表示範囲の説明図

【図9】

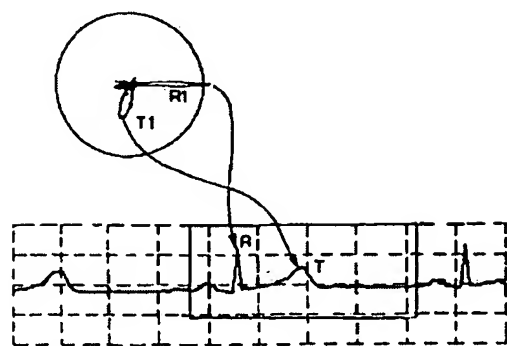


図8による心電図信号の1周期の表示例と従来表示との対応を示す例

【図10】

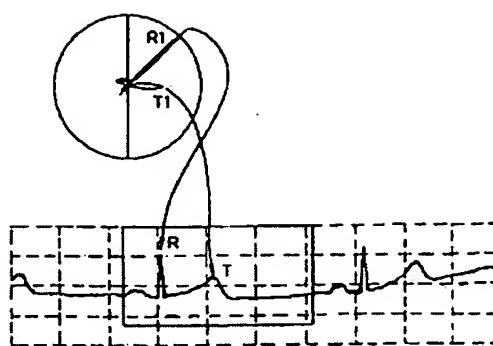


図8により心電図信号の半周期の表示例と従来表示の対応を示す例

In regards to claims 5, 12, and 15 it is rejected on the same basis as claims 1 and 4.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Astorino whose telephone number is 571-272-4723. The examiner can normally be reached on Monday-Friday, 8:30AM to 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on 571-272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Michael Astorino', with a stylized flourish extending to the right.

Michael Astorino
June 25, 2006